

**Amendments to the Claims:**

The following listing of claims will replace all prior versions and listings of claims.

**Listing of Claims:**

Claims 1-23 (Canceled)

Claim 24. (Previously presented) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of amino acid residues 1 to 121 of SEQ ID NO:68;
- (b) a protein consisting of amino acid residues 17 to 121 of SEQ ID NO:68;
- (c) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 30 contiguous amino acid residues of SEQ ID NO:68;  
and
- (d) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 50 contiguous amino acid residues of SEQ ID NO:68.

Claim 25. (Previously presented) The antibody or fragment thereof of claim 24 that specifically binds protein (a).

Claim 26. (Previously presented) The antibody or fragment thereof of claim 24 that specifically binds protein (b).

Claim 27. (Previously presented) The antibody or fragment thereof of claim 24 that specifically binds protein (c).

Claim 28. (Previously presented) The antibody or fragment thereof of claim 24 that specifically binds protein (d).

Claim 29. (Previously presented) The antibody or fragment thereof of claim 25 that specifically binds protein (b).

Claim 30. (Previously presented) The antibody or fragment thereof of claim 24, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 31. (Previously presented) The antibody or fragment thereof of claim 24 which is a human antibody.

Claim 32. (Previously presented) The antibody or fragment thereof of claim 24 which is a polyclonal antibody.

Claim 33. (Previously presented) The antibody or fragment thereof of claim 24 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 34. (Previously presented) The antibody or fragment thereof of claim 24 which is labeled.

Claim 35. (Previously presented) The antibody or fragment thereof of claim 34, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 36. (Previously presented) The antibody or fragment thereof of claim 24, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 37. (Previously presented) The antibody or fragment thereof of claim 24, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 38. (Previously presented) An isolated cell that produces the antibody or fragment thereof of claim 24.

Claim 39. (Previously presented) A hybridoma that produces the antibody or fragment thereof of claim 24.

Claim 40. (Previously presented) An isolated antibody or fragment thereof obtained from an animal that has been immunized with a protein selected from the group consisting of:

- (a) a protein comprising the amino acid sequence of amino acid residues 1 to 121 of SEQ ID NO:68;
- (b) a protein comprising the amino acid sequence of amino acid residues 17 to 121 of SEQ ID NO:68;
- (c) a protein comprising the amino acid sequence of at least 30 contiguous amino acid residues of SEQ ID NO:68; and
- (d) a protein comprising the amino acid sequence of at least 50 contiguous amino acid residues of SEQ ID NO:68;

wherein said antibody or fragment thereof specifically binds to said amino acid sequence.

Claim 41. (Previously presented) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (a).

Claim 42. (Previously presented) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (b).

Claim 43. (Previously presented) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (c).

Claim 44. (Previously presented) The antibody or fragment thereof of claim 40 obtained from an animal immunized with protein (d).

Claim 45. (Previously presented) The antibody or fragment thereof of claim 40 which is a monoclonal antibody.

Claim 46. (Previously presented) The antibody or fragment thereof of claim 40 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a polyclonal antibody;
- (c) a humanized antibody;
- (d) a single chain antibody; and
- (e) a Fab fragment.

Claim 47. (Previously presented) An isolated monoclonal antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of amino acid residues 1 to 121 of SEQ ID NO:68;
- (b) a protein consisting of amino acid residues 17 to 121 of SEQ ID NO:68;
- (c) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 30 contiguous amino acid residues of SEQ ID NO:68; and
- (d) a protein consisting of a portion of SEQ ID NO:68, wherein said portion comprises at least 50 contiguous amino acid residues of SEQ ID NO:68.

Claim 48. (Previously presented) The antibody or fragment thereof of claim 47 that specifically binds protein (a).

Claim 49. (Previously presented) The antibody or fragment thereof of claim 47 that specifically binds protein (b).

Claim 50. (Previously presented) The antibody or fragment thereof of claim 47 that specifically binds protein (c).

Claim 51. (Previously presented) The antibody or fragment thereof of claim 47 that specifically binds protein (d).

Claim 52. (Previously presented) The antibody or fragment thereof of claim 49, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 53. (Previously presented) The antibody or fragment thereof of claim 49 which is a human antibody.

Claim 54. (Previously presented) The antibody or fragment thereof of claim 49 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 55. (Previously presented) The antibody or fragment thereof of claim 49 which is labeled.

Claim 56. (Previously presented) The antibody or fragment thereof of claim 55, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 57. (Previously presented) The antibody or fragment thereof of claim 49, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 58. (Previously presented) The antibody or fragment thereof of claim 49, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 59. (Previously presented) An isolated cell that produces the antibody or fragment thereof of claim 49.

- Claim 60. (Previously presented) A hybridoma that produces the antibody or fragment thereof of claim 49.
- Claim 61. (Previously presented) An isolated antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:
- (a) a protein consisting of the full-length polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
  - (b) a protein consisting of the secreted portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
  - (c) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 30 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922; and
  - (d) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 50 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922.
- Claim 62. (Previously presented) The antibody or fragment thereof of claim 61 that specifically binds protein (a).
- Claim 63. (Previously presented) The antibody or fragment thereof of claim 61 that specifically binds protein (b).
- Claim 64. (Previously presented) The antibody or fragment thereof of claim 61 that specifically binds protein (c).
- Claim 65. (Previously presented) The antibody or fragment thereof of claim 61 that specifically binds protein (d).

Claim 66. (Previously presented) The antibody or fragment thereof of claim 62 that specifically binds protein (b).

Claim 67. (Previously presented) The antibody or fragment thereof of claim 63, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 68. (Previously presented) The antibody or fragment thereof of claim 63 which is a human antibody.

Claim 69. (Previously presented) The antibody or fragment thereof of claim 63 which is a polyclonal antibody.

Claim 70. (Previously presented) The antibody or fragment thereof of claim 63 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 71. (Previously presented) The antibody or fragment thereof of claim 63 which is labeled.

Claim 72. (Previously presented) The antibody or fragment thereof of claim 71, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 73. (Previously presented) The antibody or fragment thereof of claim 63, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 74. (Previously presented) The antibody or fragment thereof of claim 63, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 75. (Previously presented) An isolated cell that produces the antibody or fragment thereof of claim 63.

Claim 76. (Previously presented) A hybridoma that produces the antibody or fragment thereof of claim 63.

Claim 77. (Previously presented) An isolated antibody or fragment thereof obtained from an animal that has been immunized with a protein selected from the group consisting of:

- (a) a protein comprising the amino acid sequence of the full-length polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (b) a protein comprising the amino acid sequence of the secreted portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (c) a protein comprising the amino acid sequence of at least 30 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922; and
- (d) a protein comprising the amino acid sequence of at least 50 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;

wherein said antibody or fragment thereof specifically binds to said amino acid sequence.

Claim 78. (Previously presented) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (a).

Claim 79. (Previously presented) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (b).



Claim 80. (Previously presented) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (c).

Claim 81. (Previously presented) The antibody or fragment thereof of claim 77 obtained from an animal immunized with protein (d).

Claim 82. (Previously presented) The antibody or fragment thereof of claim 77 which is a monoclonal antibody.

Claim 83. (Previously presented) The antibody or fragment thereof of claim 77 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a polyclonal antibody;
- (c) a humanized antibody;
- (d) a single chain antibody; and
- (e) a Fab fragment.

Claim 84. (Previously presented) An isolated monoclonal antibody or fragment thereof that specifically binds to a protein selected from the group consisting of:

- (a) a protein consisting of the full-length polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (b) a protein consisting of the secreted portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922;
- (c) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 30 contiguous amino acid residues of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922; and
- (d) a protein consisting of a portion of the polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922, wherein said portion comprises at least 50 contiguous amino acid residues of the

polypeptide encoded by the HPMBQ91 cDNA contained in ATCC Deposit Number 97922.

Claim 85. (Previously presented) The antibody or fragment thereof of claim 84 that specifically binds protein (a).

Claim 86. (Previously presented) The antibody or fragment thereof of claim 84 that specifically binds protein (b).

Claim 87. (Previously presented) The antibody or fragment thereof of claim 84 that specifically binds protein (c).

Claim 88. (Previously presented) The antibody or fragment thereof of claim 84 that specifically binds protein (d).

Claim 89. (Previously presented) The antibody or fragment thereof of claim 85 that specifically binds protein (b).

Claim 90. (Previously presented) The antibody or fragment thereof of claim 86, wherein said protein bound by said antibody or fragment thereof is glycosylated.

Claim 91. (Previously presented) The antibody or fragment thereof of claim 86 which is a human antibody.

Claim 92. (Previously presented) The antibody or fragment thereof of claim 86 which is selected from the group consisting of:

- (a) a chimeric antibody;
- (b) a humanized antibody;
- (c) a single chain antibody; and
- (d) a Fab fragment.

Claim 93. (Previously presented) The antibody or fragment thereof of claim 86 which is labeled.

Claim 94. (Previously presented) The antibody or fragment thereof of claim 93, wherein the label is selected from the group consisting of:

- (a) an enzyme;
- (b) a radioisotope; and
- (c) a fluorescent label.

Claim 95. (Previously presented) The antibody or fragment thereof of claim 86, wherein said antibody or fragment thereof specifically binds to said protein in a Western blot.

Claim 96. (Previously presented) The antibody or fragment thereof of claim 86, wherein said antibody or fragment thereof specifically binds to said protein in an ELISA.

Claim 97. (Previously presented) An isolated cell that produces the antibody or fragment thereof of claim 86.

Claim 98. (Previously presented) A hybridoma that produces the antibody or fragment thereof of claim 86.